

LED FLEXIBLE STRIP LIGHT-HR SERIES
PRODUCT SERIES DATASHEET



LED Flexible Strip Light High Ra



88Light LED Flexible Strip light-HR series is ideal for Backlighting, Decoration and Advertising. With the 3M adhesive backing, the Strip can be mounted easily anywhere. The brightness of one meter strip is equal to that of 60W halogen lamp. Low power, low voltage and low heat ensure high security. 88Light LED Flexible Strip is widely used in Shopping Mall, Parking lots, Bus, Bank, Living Room, Café.

Applications:



PRODUCT FEATURES

- Lightweight and slim, suitable for small spaces.
- High CRI, Ra>97.
- Flexible, easy to bend into a variety of shapes.
- High quality single color, high brightness, low luminance decay SMD Chip.
- A variety of colors for option 3000K, 4000K and 6500K.
- Trimmable each 6 LEDs (24v).
- 24V dc low voltage, low power consumption, low heat, higher security.
- Long life over 30,000 hours with free maintenance.
- Allow frequent on off.
- 3M adhesive backing for easy installation.
- Working temperature: -20 ~ +40°C

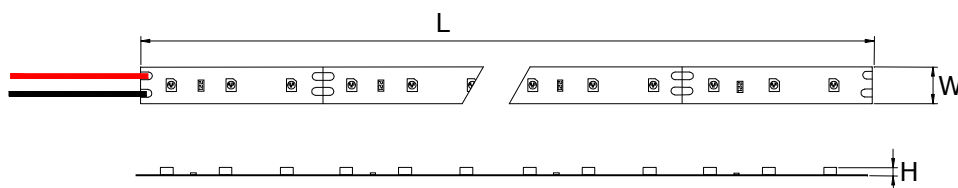


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PRODUCT DIAGRAM

IP20



Product Name ^{2,3,4,5}	Length ¹	Width	Height
88L-LS-3528-60-N	5000mm	8mm	2.6mm
88L-LS-3528-120-N	5000mm	8mm	2.6mm
88L-LS-3528-240-N	5000mm	10mm/15mm	2.6mm
88L-LS-2835-60-N	5000mm	10mm	2.6mm
88L-LS-2835-120-N	5000mm	10mm	2.6mm
88L-LS-5050-30-N	5000mm	10mm	2.6mm
88L-LS-5050-60-N	5000mm	10mm	2.6mm
88L-LS-5050-120-N	5000mm	15mm	2.6mm

Note 1: The dimension of the strips doesn't change with the LED color (NW-Natural white, CW-Cool White), or LED number/5m.

Note 2: N means IP20, naked FPC board.

Note 3: DF means IP64; it's dropped glue FPC board, if there is it.

Note 4: SF means IP65; it's closed in PC/Silicon Tube, if there is it.

Note 5: GF means IP67, it's closed in PC/ Silicon Tube and Full filled with glue, if there is it.

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TECHNICAL DATA

Electrical data ⁶:

Product Name ⁷	Input Voltage [Vdc]	Base	Chip	Dimmable [Y/N]	LED Qty [LED/m]	IP grade
88L-LS-3528-60-N	24V	Power cable	3528	Y	60	IP20
88L-LS-3528-120-N	24V	Power cable	3528	Y	120	IP20
88L-LS-3528-240-N	24V	Power cable	3528	Y	240	IP20
88L-LS-2835-60-N	24V	Power cable	2835	Y	60	IP20
88L-LS-2835-120-N	24V	Power cable	2835	Y	120	IP20
88L-LS-5050-30-N	24V	Power cable	5050	Y	30	IP20
88L-LS-5050-60-N	24V	Power cable	5050	Y	60	IP20
88L-LS-5050-120-N	24V	Power cable	5050	Y	120	IP20

Note 6: Absolute ratings @ 25°C.

Note 7: 88L-LS-3528-240 strips, there is the one line and double lines with the same LED qty.

Optical Characteristics:

Product Name	Color	Color Temperature	Power [w/m]	Luminous ⁸ [lm/m]	Beam Angle [°]	CRI [Ra]
88L-LS-3528-60-N-WW	Warm white	3000K	4.8W	300	120	>97
88L-LS-3528-60-N-NW	Nature white	4000K	4.8W	350	120	>97
88L-LS-3528-60-N-CW	Cool white	6500K	4.8W	400	120	>97
88L-LS-3528-120-N-WW	Warm white	3000K	9.6W	600	120	>97
88L-LS-3528-120-N-NW	Nature white	4000K	9.6W	700	120	>97
88L-LS-3528-120-N-CW	Cool white	6500K	9.6W	800	120	>97
88L-LS-3528-240-N-WW	Warm white	3000K	19.2W	1200	120	>97
88L-LS-3528-240-N-NW	Nature white	4000K	19.2W	1400	120	>97
88L-LS-3528-240-N-CW	Cool white	6500K	19.2W	1600	120	>97
88L-LS-2835-60-N-WW	Warm white	3000K	14.4W	750	120	>97
88L-LS-2835-60-N-NW	Nature white	4000K	14.4W	800	120	>97
88L-LS-2835-60-N-CW	Cool white	6500K	14.4W	850	120	>97

Note 6: Absolute ratings @ 25°C

Note 8: Tolerance of measurement of luminous intensity±15%.

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TECHNICAL DATA

Optical Characteristics:

Product Name	Color	Color Temperature	Power [w/m]	Luminous ⁸ [lm/m]	Beam Angle [°]	CRI [Ra]
88L-LS-2835-120-N-WW	Warm white	3000K	28.8W	1500	120	>97
88L-LS-2835-120-N-NW	Nature white	4000K	28.8W	1600	120	>97
88L-LS-2835-120-N-CW	Cool white	6500K	28.8W	1700	120	>97
88L-LS-5050-30-N-WW	Warm white	3000K	7.2W	370	120	>97
88L-LS-5050-30-N-NW	Nature white	4000K	7.2W	400	120	>97
88L-LS-5050-30-N-CW	Cool white	6500K	7.2W	420	120	>97
88L-LS-5050-60-N-WW	Warm white	3000K	14.4W	750	120	>97
88L-LS-5050-60-N-NW	Nature white	4000K	14.4W	800	120	>97
88L-LS-5050-60-N-CW	Cool white	6500K	14.4W	850	120	>97
88L-LS-5050-120-N-WW	Warm white	3000K	28.8W	1500	120	>97
88L-LS-5050-120-N-NW	Nature white	4000K	28.8W	1600	120	>97
88L-LS-5050-120-N-CW	Cool white	6500K	28.8W	1700	120	>97

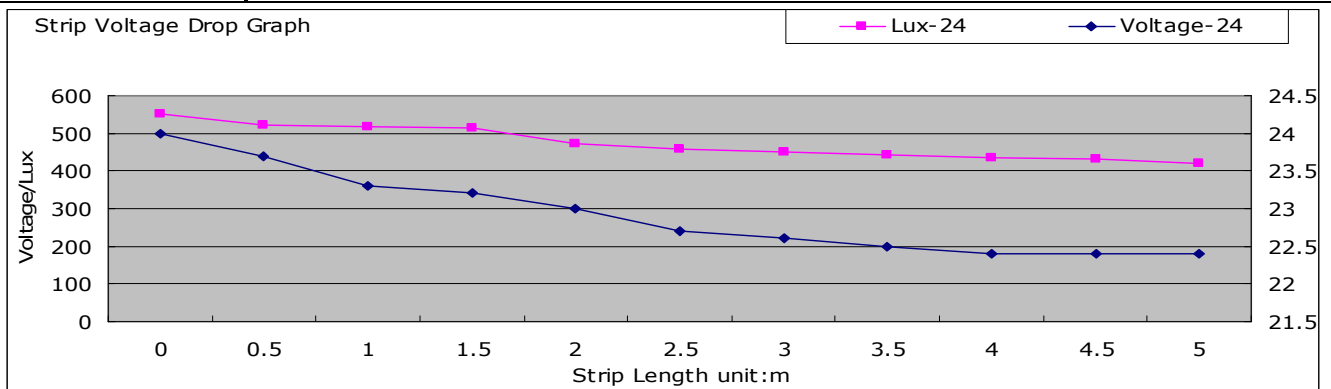
Note 6: Absolute ratings @ 25°C

Note 8: Tolerance of measurement of luminous intensity±15%.

Voltage-Illuminance Characteristic^{6, 9}:

Model: 3528-120LED-24V-6000K 8mm width FPC.

88L-LS-3528-120M-24	0m	0.5m	1.0m	1.5m	2.0m	2.5m	3.0m	3.5m	4.0m	4.5m	5.0m
Voltage(v)	24	23.7	23.3	23.2	23	22.7	22.6	22.5	22.4	22.4	22.4
Brightness(Lux)	553	521	518	515	473	458	451	441	436	430	421



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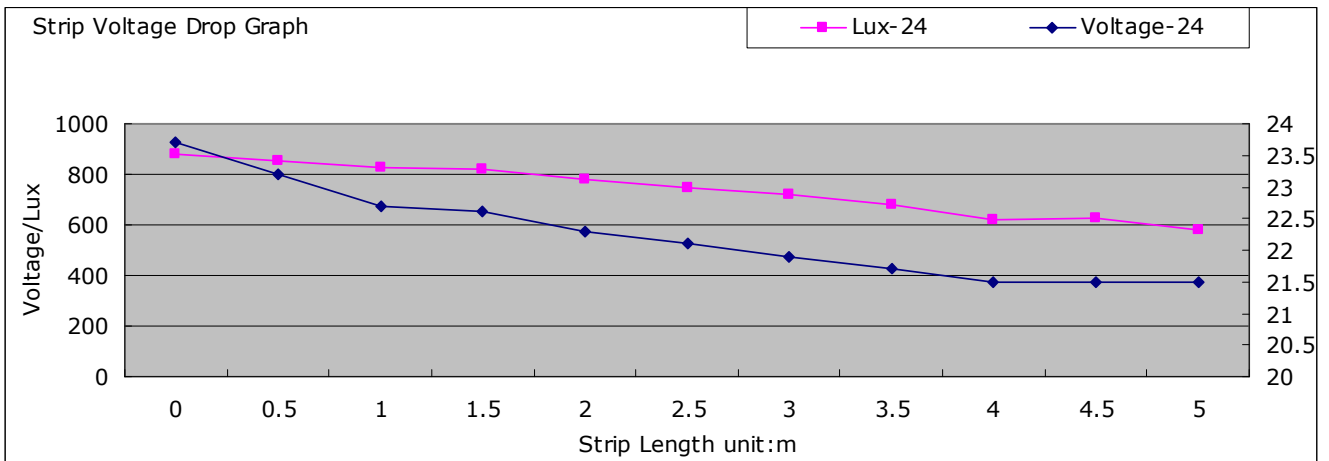


TECHNICAL DATA

Voltage-Illuminance Characteristic ^{6, 9}:

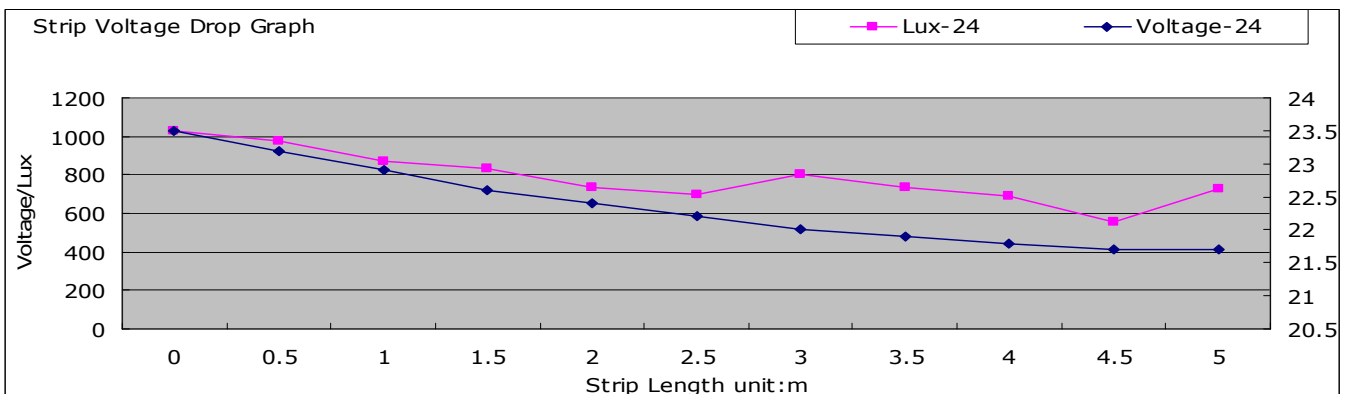
Model: 2835-120LED-24V-6500K 10mm width FPC.

88L-LS-2835-120M-24	0m	0.5m	1.0m	1.5m	2.0m	2.5m	3.0m	3.5m	4.0m	4.5m	5.0m
Voltage(v)	23.7	23.2	22.7	22.6	22.3	22.1	21.9	21.7	21.5	21.5	21.5
Brightness(Lux)	880	853	830	820	780	750	720	680	620	625	580



Model: 5050-60LED-24V-6000K 10mm width FPC.

88L-LS-5050	0m	0.5m	1.0m	1.5m	2.0m	2.5m	3.0m	3.5m	4.0m	4.5m	5.0m
Voltage(v)	23.5	23.2	22.9	22.6	22.4	22.2	22.0	21.9	21.8	21.7	21.7
Brightness(Lux)	1029	972	869	836	738	700	800	737	691	553	727



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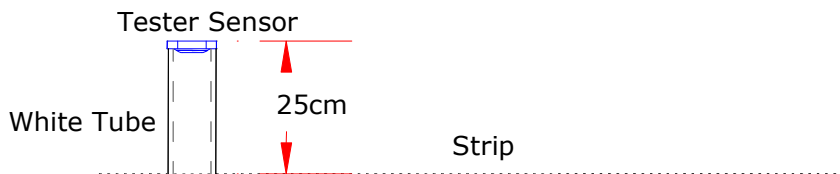
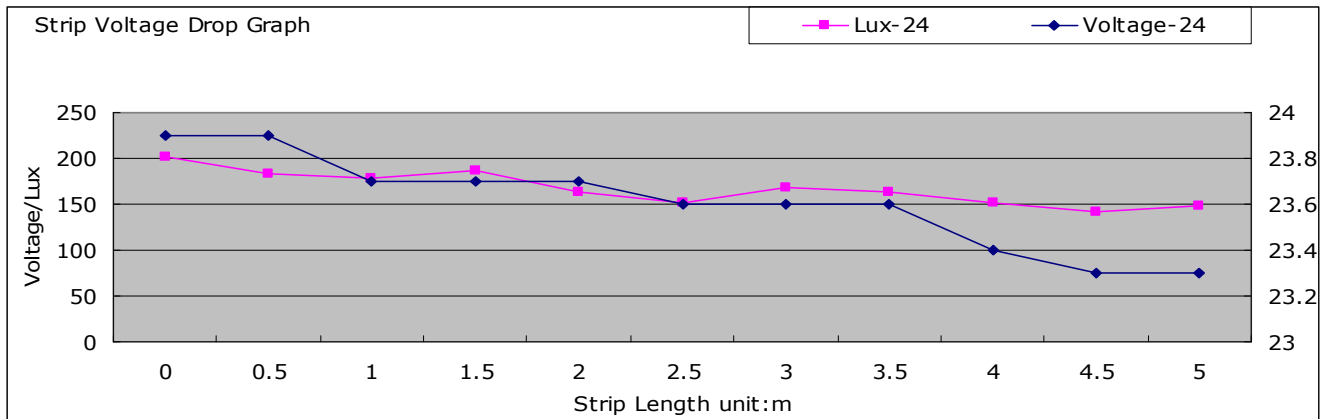


TECHNICAL DATA

Voltage-Illuminance Characteristic ^{6, 9}:

Model: 3528-60LED-24V-6000K 8mm width FPC.

88L-LS-3528-60M-12	0m	0.5m	1.0m	1.5m	2.0m	2.5m	3.0m	3.5m	4.0m	4.5m	5.0m
Voltage(v)	23.9	23.9	23.7	23.7	23.7	23.6	23.6	23.6	23.4	23.3	23.3
Brightness(Lux)	201	184	179	186	163	152	169	163	151	142	149



Note 6: Absolute ratings @ 25°C.

Note 9: Testing voltage is DC24V /DC12V, standard LED adaptor and one side input from the beginning side.

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TECHNICAL DATA

LED Chip optical parameter (3528):

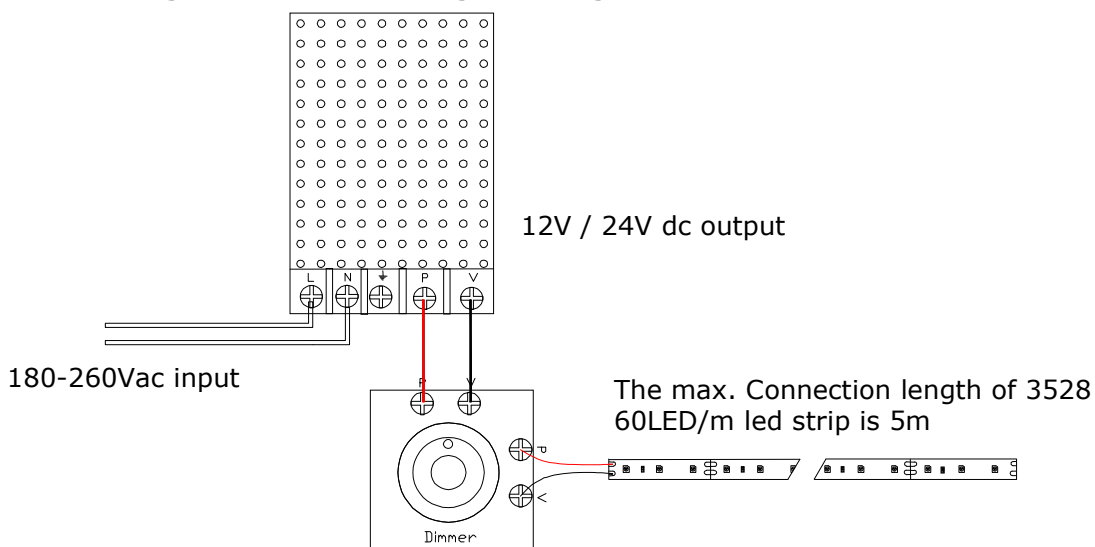
R1 = 99.10	R2 = 99.14	R3 = 96.79	R4 = 98.73	R5 = 98.04
R6 = 97.59	R7 = 98.26	R8 = 96.99	R9 = 93.06	R10 = 96.23
R11 = 98.66	R12 = 83.02	R12 = 99.37	R14 = 97.29	R15 = 98.01
VF = 3.028V	IF = 19.96mA	P = 60.47mW	Lm = 5.349lm	LE = 88.45lm/W
Tc = 2965K	Ra = 98.1	Rf = 94.7	Rg: 101.0	

LED Strip optical parameter (3528):

R1 = 100	R2 = 100	R3 = 97	R4 = 99	R5 = 98
R6 = 97	R7 = 97	R8 = 97	R9 = 94	R10 = 97
R11 = 99	R12 = 83	R12 = 100	R14 = 97	R15 = 98
U = 23.9V	I = 1.780A	P = 42.72W	PF = 1.000	
LE = 78.06lm/W	Tc = 2975K	Ra = 98.0	Lm = 3335.01lm	

PRODUCT INSTALLATION

Electrical diagram and mounting drawing.

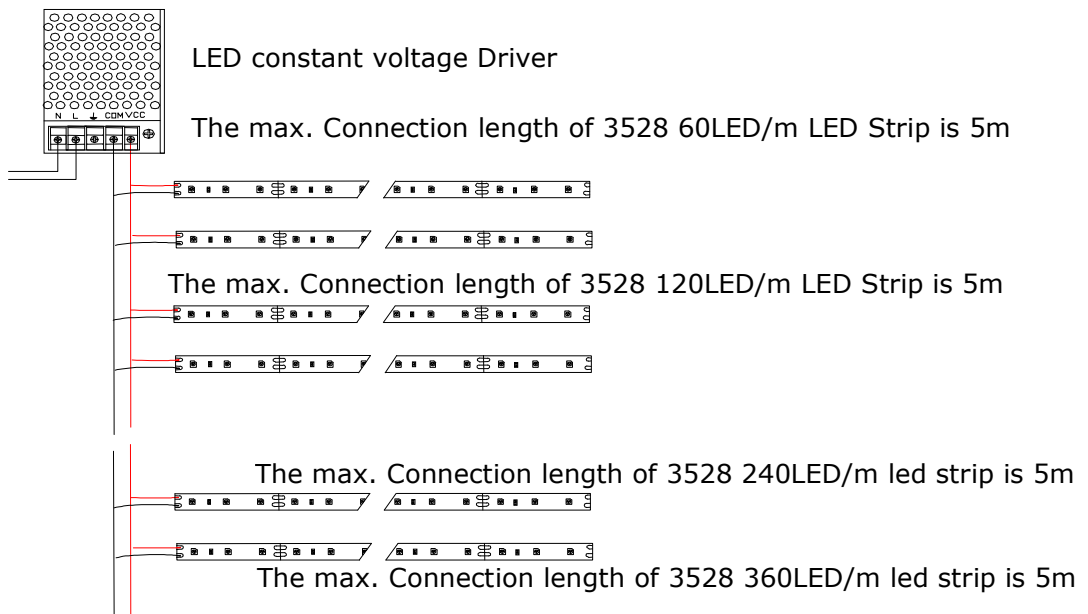


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PRODUCT INSTALLATION

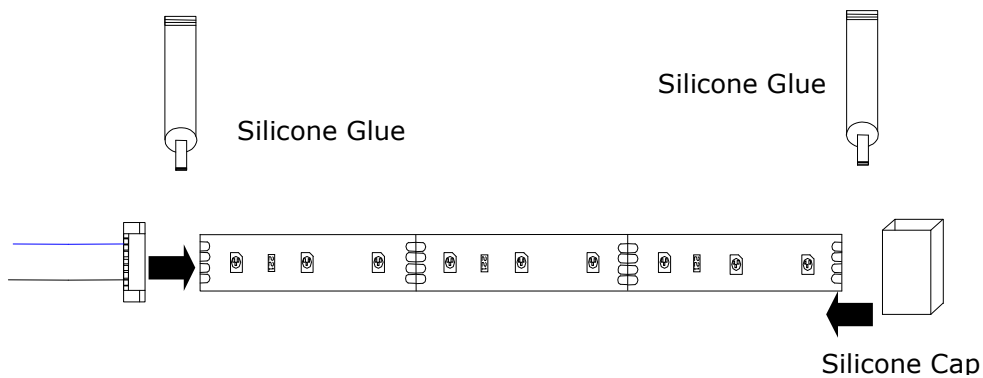
Hard-wired Driver connection:
Single Color



Note 10: When 5 meters strip is connected, please connect input cable from beginning side and end side at the same time to reduce brightness drop.

Strip series cutting and connection

For IP64, IP65 and IP68 Strips, please install a cap at the end after cutting.

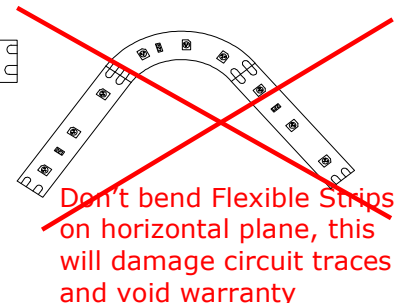
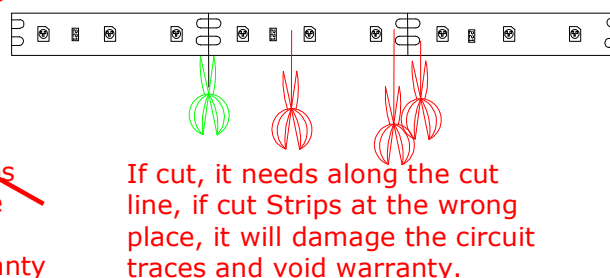
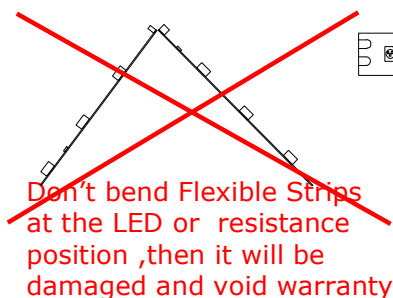


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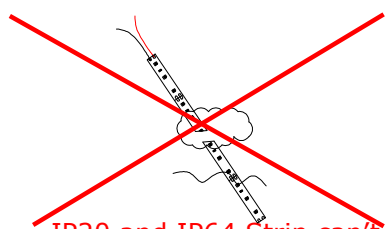


SAFETY

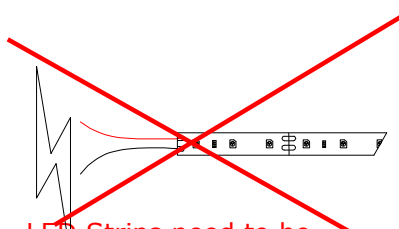
1. **Always** consult a qualified, licensed electrician prior to the installation of this product.
2. **Always** pre-test your strip light assembly by connecting the strip to a power supply and ensure that all components are joined properly before installing.
3. It is recommended that adequate airflow and heat sink be taken into account in the application and installation of this product. Improper thermal management may lead to premature failure.
4. Exceeding the operating temperature values may damage LED chips by reducing the lamp life and lumen output, and impact color consistency.
5. Avoid voltage drop by using a dedicated line for each maximum power consumption line, because voltage drop will cause brightness drop.
6. This product should only be cut at "cut points," if it's cut at the wrong place, then some LED will not work.
7. "Voltage drop" is a gradual lessening of power through a wire over a long distance. The farther the light is away from the power source, the more voltage drop will occur. Voltage drop becomes a significant factor in any LED light application when the distance between the lights and the power source is greater than 15 feet (It's about 15m for 3528 60LED, but its 10m for 3528 120LED). Consult a licensed electrician and an online voltage drop calculator to learn what gauge wire will work best for your configuration.
8. The manufacturer rates each power supply for maximum power output at optimum thermal and voltage conditions. As with any power supply, true actual maximum continuous current output depends upon various environmental factors such as ambient temperature, line voltage fluctuations, and orientation that may affect heat dissipation. For optimum performance, make sure the load is between 50% and 80% of the total capacity of the power supply.
9. LED products are continuously being improved upon in ever-shortening manufacturing cycles. LED color temperature (kelvin), lumen output, and product appearance can change from order to order. Please note that variation in color temperature (kelvin) is commonly +/- 250k and brightness (lumens) is +/- 10%.



SAFETY

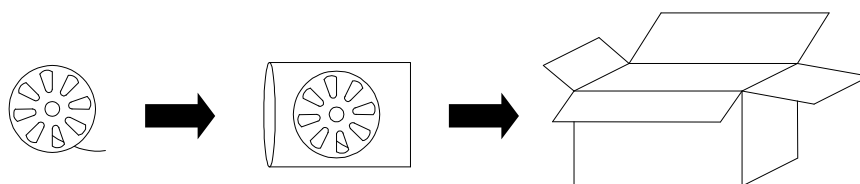


IP20 and IP64 Strip can't be used underwater or in wet place, or it will be void warranty.



LED Strips need to be connected to the correct voltage. Or it will be damaged and void warranty.

PACKING



LED FLEXIBLE STRIP LIGHT-HR SERIES
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PACKING

Product Name	Pcs/box	Box dimensions	Gross Weight	Net Weight
88L-LS-3528-60-N	100R/Box	51x38x28cm	12Kg	9Kg
88L-LS-3528-120-N	100R/Box	51x38x28cm	12Kg	9Kg
88L-LS-3528-240-N	50R/Box	51x38x28cm	12Kg	9Kg
88L-LS-2835-60-N	100R/Box	51x38x28cm	12Kg	9Kg
88L-LS-2835-120-N	100R/Box	51x38x28cm	12Kg	9Kg
88L-LS-5050-30-N	100R/Box	51x38x28cm	12Kg	9Kg
88L-LS-5050-60-N	100R/Box	51x38x28cm	12Kg	9Kg
88L-LS-5050-120-N	50R/Box	51x38x28cm	12Kg	9.5Kg

Note 11: the default package info is only for reference.

OTHER 88Light PRODUCTS:

For more information about 88Light products, or to use our online energy saving calculation software please visit our website

www.88light.com

DISCLAIMER:

88Light reserves the right to modify the design of our products as part of the company’s program of continuous improvement. 88Light cannot guarantee to match existing installed product for subsequent orders or replace the product exactly to match the product you are replacing in product appearance, color, or brightness. Specifications are subject to change without notice.